WHAT IS CLAIMED:

1. An apparatus for use on a foot, comprising:

(a) a support portion;

(b) a first material within the support portion and enclosing a space in which a foot may be placed;

(c) a pump embedded in the heel; and

(d) a conduit connecting the pump to the space.

2. The article of claim 1, wherein support portion comprises a shoe shell for surrounding the foot, wherein the first material is flexible and bonded to the shoe shell, and wherein the space is substantially airtight when a foot is inserted therein.

3. The apparatus of claim 1, wherein the apparatus has an exterior appearance of one of a shoe and boot, and wherein the pump comprises a vacuum pump such that actuation of the pump removes fluid adjacent the foot.

4. The apparatus of claim 1, further comprising

(e) a layer of second material in the space adjacent the first material, wherein the second material is significantly more breathable than the first material.

5. The apparatus of claim l, further comprising a one-way valve in fluid communication with the pump and the conduit such that fluid will flow substantially only in one direction through the conduit.

6. The apparatus of claim 5, wherein the pump and valve are configured such that fluid flows from adjacent the foot and is released outside the apparatus.

7. The apparatus of claim 5, wherein the pump and valve are configured such that fluid flows into the apparatus.

8. The apparatus of claim 1, wherein the pump is actuated by heelstrike during a user's stride.

9. The apparatus of claim 1, wherein the support portion comprises an outer shell, and wherein the apparatus further comprises an opening in the outer shell and a fastener for closing the opening.

10. The apparatus of claim l, wherein the support portion is substantially rigid.

11. The apparatus of claim 1, wherein fluid removed from adjacent the foot by the pump creates a force that holds the apparatus to the foot.

12. The apparatus of claim 1, wherein the apparatus has an external appearance of one of a shoe and a boot.

13. A method for removing fluid from within footwear, the footwear having a heel and an interior, comprising the steps of:

(a) providing a first material within the interior of the footwear that forms a space into which a foot can be placed;

(b) drawing a vacuum against the space after a user's foot is inserted into the footwear.

14. The method of claim 13, further comprising:

(c) providing a second material adjacent the first material, wherein the second material is significantly more breathable than the first material, and wherein the first and second materials are flexible.

15. The method of claim 13, wherein step (a) comprises bonding the first material to the interior of the footwear and wherein the first material forms a seal with the user's foot, and wherein step (b) is performed by a heelstrike-actuated vacuum pump within the heel.

16. The method of claim 13, further comprising:

(c) providing a one-way valve in fluid communication with the pump and the conduit such that fluid will substantially flow only in one direction through the conduit.

17. The method of claim 13, wherein the vacuum is sufficient to assist in holding the footwear to the user's foot.

18. The method of claim 13, further comprising the step of:

(c) discontinuing the drawing of the vacuum and increasing pressure within the space.

19. A method for changing the fluid pressure from within footwear, the footwear having a heel and an interior, comprising the steps of:

(a) providing a first material within the interior of the footwear;

(b) providing a fluid conduit that enables fluid to flow at least one of in and out of the interior;

(c) controlling fluid flow in or out of the interior through the fluid conduit after a user's foot is inserted into the footwear to change the fluid pressure within the interior.

20. The method of claim 19, wherein the first material provides a seal between the interior and a user's foot, wherein step (c) comprises forcing fluid out of the interior and substantially preventing fluid flow into the interior.